Initial Evaluation of the

Barrington River Placer Claims

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GEOLOGICAL REPORT

20 June 1986

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INTRODUCTION

The Barrington River Placer Group consists of PML 840 and PLs 6945, 8259, 8260 and 9893 situated on the Barrington River, above it's confluence with the Chutine River and approximately 19 km north of the Stikine River in northwestern B.C. Refer to B.C. Placer Titles Map 104G12 (west half).

The writer visited the property in June, 1986 accompanied by John Hope, president of Integrated Resources Ltd. and Wayne Eberg, leaseholder. Attention was restricted to PML 840 and PL 9893. The question posed at that time was whether the prospect warrants investigation as a potential placer gold producer. The writer has no doubt that further investigation is warranted.

ACCESS

On this trip, access was by Jet Ranger of Frontier Helicopters from their base at Dease Lake Airport directly to the main zone of interest on PML 840 which took about 45 minutes. There is also a trail from the Stikine River which has been used by machinery in the past and which could be improved to allow access to tracked and 4WD vehicles. The Stikine River is navigable from Telegraph Creek (which is upstream from the entry of the Chutine River) down to tidewater.

GEOLOGY

Bedrock which outcrops in cliffs along the river has been mapped by the G.S.C. as Upper Triassic volcanics and Permian Limestones. Most of the smaller loose material along the stream is volcanic with occasional limestone, while the larger boulders are granitic to dioritic, presumably from a late Mesozoic(?) intrusive upstream on Mt. Barrington. The volcanics are quite varied, and include trachytes, andesites, pyroclastics and tuffs. Porphyries are very common.

Above PML 840 a steep walled canyon has cut through beds of steeply dipping felsitic volcanics. At the south end of this canyon a more

resistant bed has deflected the river to the west, thereby protecting a thick deposit of river gravels from subsequent erosion. These gravels are auriferous practically from the grass roots down, and they have attracted the attention of prospectors and miners throughout this century and possibly earlier.

SOURCE OF GOLD

The source of the gold might be the volcanic rocks themselves, and the folding and intrusion that they have undergone was probably an important factor in mobilization of the gold. Quartz and pyrite are uncommon, and in contrast to many Yukon and B.C. placer districts where gold occurring in unweathered bedrock is tied up in pyrite and was released during the Tertiary Period only close to the surface, probably by bacterial action, and then precipitated - the gold in the Barrington River placer source area might occur commonly as native gold even in unweathered bedrock. Most of it would be widely scattered, although the environment is a good one in which to prospect for hard rock gold deposits.

MINING HISTORY

The property has the "look" of a bona fide placer property in that several generations of prospectors have left their mark. Despite this, only a small part of the considerable volume of gravel has been disturbed. Practically all past production has been accounted for by a bucket dredge and a dragline, both in the '30s. The dredge was soon wrecked in a flood and the dragline was reportedly removed after one season to a more accessible area. Numerous small pits and at least two flume courses mark the surface, and it seems likely that several bars within the present river would have been worked and reworked by hand methods over the decades that this prospect has been known.

TOPOGRAPHY

The deposits on PML 840 comprise crudely stratified river gravels which have been partially eroded by the river at several levels.

Along the east side of the northernmost part, the highest deposits appear to be due to slide material which has entered the valley from draws. These draws occur between prominant outcrops which have generated coarse talus slopes. By their general outlines these slide deposits could be finer grained than the talus and might have a glacial origin.

Clay deposits described by Wayne Eberg as "banded" (varved?) have reportedly been attributed by some observers to the presence of a (proglacial?) lake. However, any clay deposits that I observed along the valley were probably deposited directly by the stream. The clay might have been introduced upstream as slides of moraine and then deposited by the river along quiet backwaters. Alpine glaciers might also have contributed clay directly into the valley. The island on PML 840 is low and flat, but this is simply the result of erosion achieved by the river before it assumed it's present course.

Directly across the river to the west is a high bench which is probably the same height as the highest level of river deposits elsewhere on PML 840. The bench might extend off the lease slightly to the west, and if this is the case additional staking would be advisable.

On PL 9893 a high bench continues down the west side while the ground east of the river is low and swampy. Abandoaned river channels on both sides of the present stream could provide excellent settling basins (after testing!). The river is fed by glaciers and flows throughout the season.

GOLD VALUES

The writer panned some 20 to 30 pans of gravel from shallow pits, banks and bars all over PML 840 and PL 9893 without one being devoid of colours. Only three or four pans from some river bar or from sandy surface material could be said to be low grade.

Most of the samples were selected by Wayne Eberg at places where he

had had previous success. But even if areas not sampled should be barren, the estimated values frequently indicated of several tens of dollars per cubic yard suggest that parts of this property could be quite rich. John Hope extracted the gold from four pans of gravel from a pit and told me that he had recovered 0.10 g of gold. Using a factor of 80% for purity and a value of $C450.00 per troy ounce, this would represent a value of around $C50.00 per cubic yard, which concurs with this writer's rough estimates.

EXPLORATION PROGRAM

It is recommended that the following work be undertaken:

1. Title search.
2. Development of road from the Stikine River.
3. Mapping of claim posts, benches, pits, channels, outcrops, etc. assisted by aerial photos if available at an appropriate scale. (Photos are available from the B.C. Mineral Resources Branch.)
4. Additional staking if necessary to secure all possible reserves.
5. Seismic refraction survey over parts of PML 840, and elsewhere if the results are encouraging.
6. Magnetic survey over parts of PL 9893, and elsewhere if the results are encouraging.
7. Backhoe-sampling plant program over as many different zones as possible. Each bench, channel, magnetic high, and any distinctive areas should be evaluated by samples of, say, one backhoe bucket each.

MINING

A flexible approach will be more important here than on most placer projects. Although the property is promising, a venture could fail due to inadequate allowance for any of the following factors:

1. Location: Close control of the costs of transportation and shipping to this remote site should be maintained.
2. Boulders: A means of handling large boulders encountered during mining must be provided. The means might be simple and straight forward, but the equipment has to be available. It remains to

be determined whether large boulders continue within the gravels at depth.

3. Black Sand: Black sand, which appears to be mostly magnetite, is common enough that sluice boxes might not be the preferred means of recovery. (There is also a potential benefit in that magnetic surveys should be useful in determining the richest ground.)
4. Restricted Room: The bench deposits on PML 840 occur in a confined area that might not permit a settling pond close to mining activities. It is recommended that tailings be pumped from the plant and that settling ponds make use of the abandoned channels elsewhere on the property provided that testing does not identify them as priority mining areas.

CONCLUSIONS

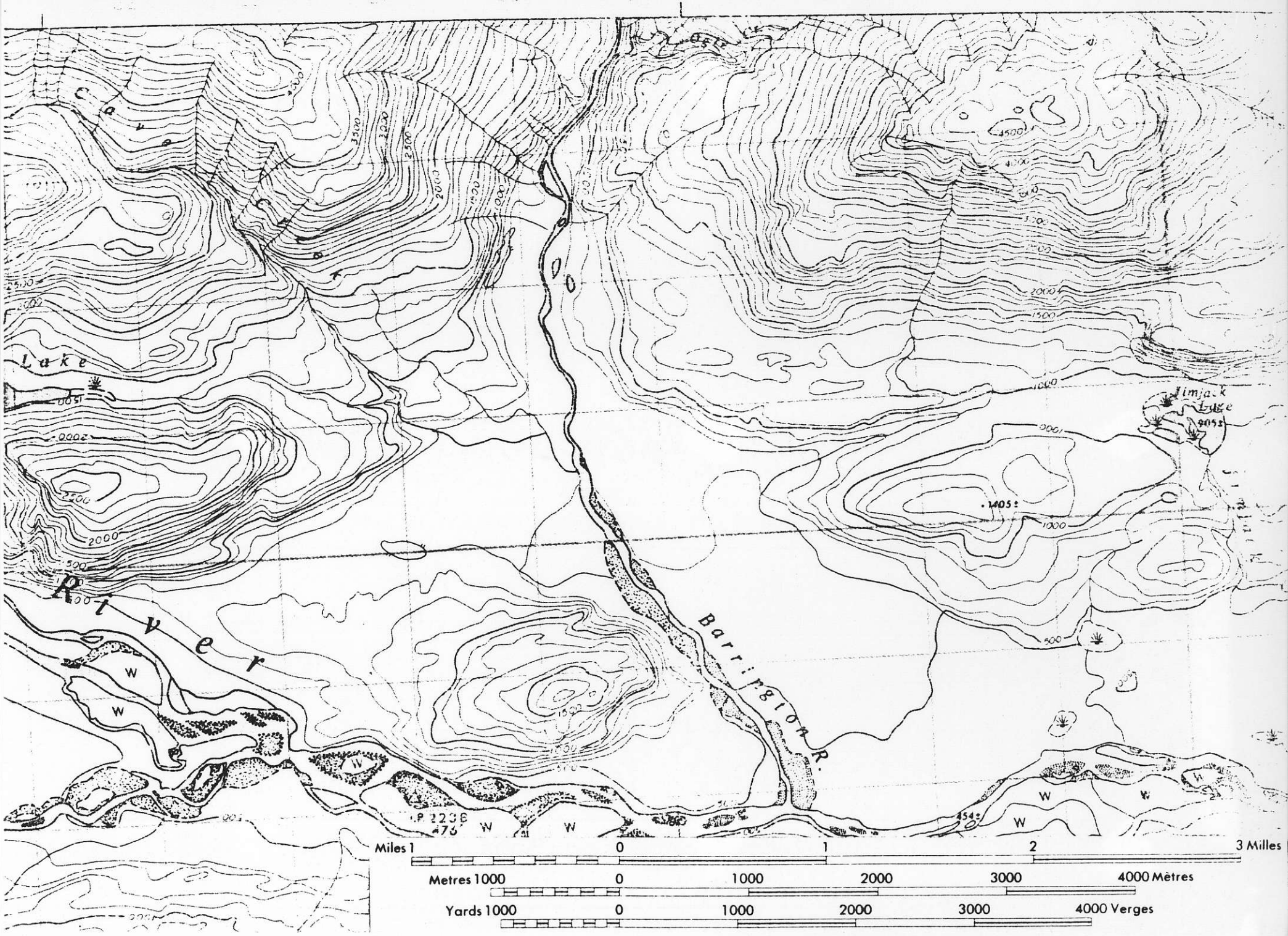
This property has excellent potential. After the title search, emphasis should be placed upon developing road access, and then on determining volumes, grades and operating procedures. Mining might require a more sophisticated plant than a sluice box to achieve good recovery.

CERTIFICATE

1. I am a professional geologist and a member of the Association of Professional Engineers, Geologists & Geophysicists of Alberta (APEGGA).
2. I am a graduate of the Provincial Institute of Mining, Haileybury, Ontario (Diploma in Mining Technology granted 1962) and Michigan Technological University, Houghton, Michigan (B.Sc. Geology, honours, granted 1966; also completed M.Sc. Geology course, 1967).
3. I have served as an executive director of a placer mining company listed on a public stock exchange, and I consider myself familiar with the evaluation of placer prospects and placer mining activities.
4. I have visited and am familiar with the area described in this report.
5. I have no beneficial interest in the property and do not expect to receive any return, direct or indirect, from any mining activity that might take place there.

M. Wetherley

Michael P. Wetherley, P.Geol.
20 June, 1986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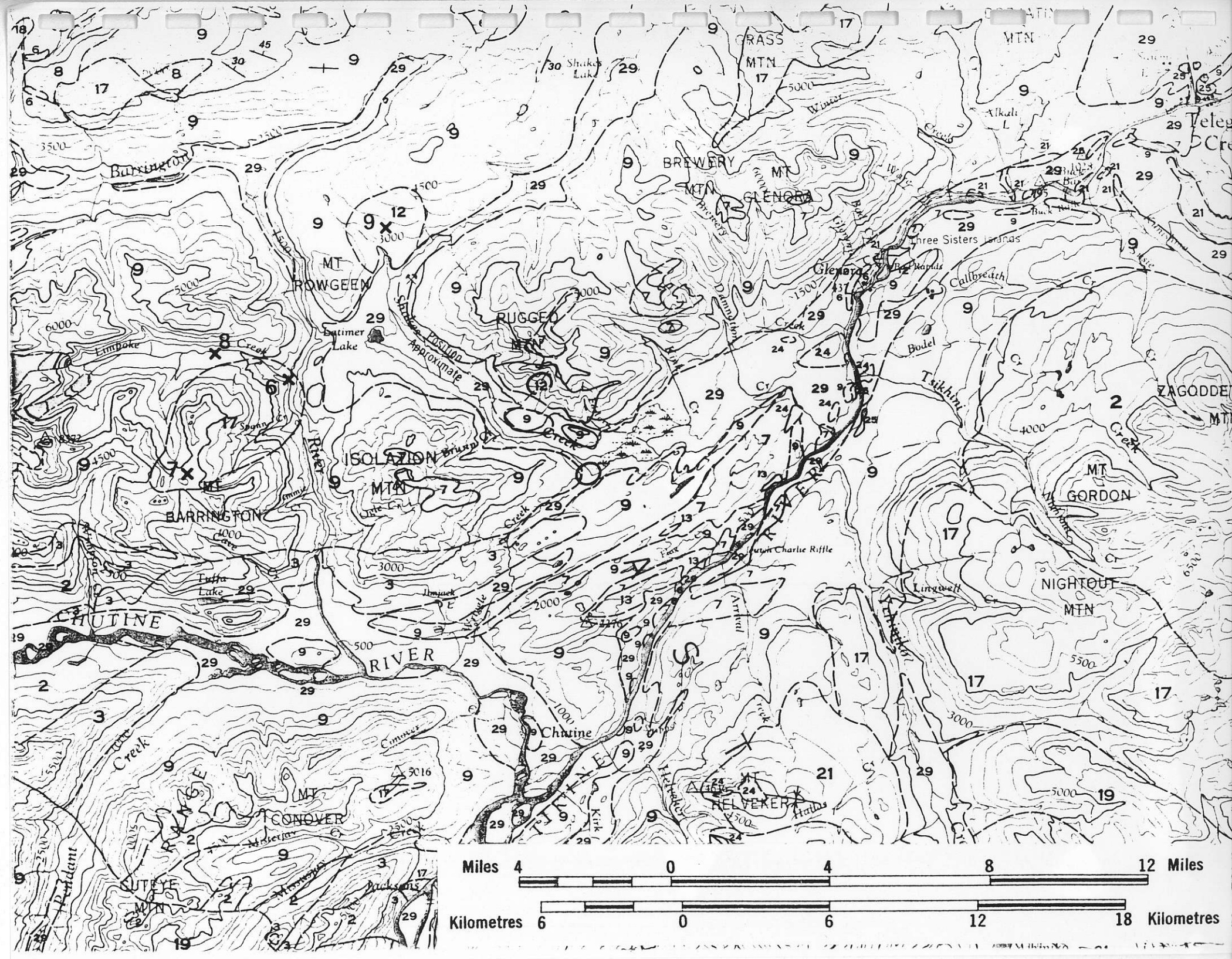
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MT CONOVER
OUTEYE MTN
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Barrington
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Batimer Lake
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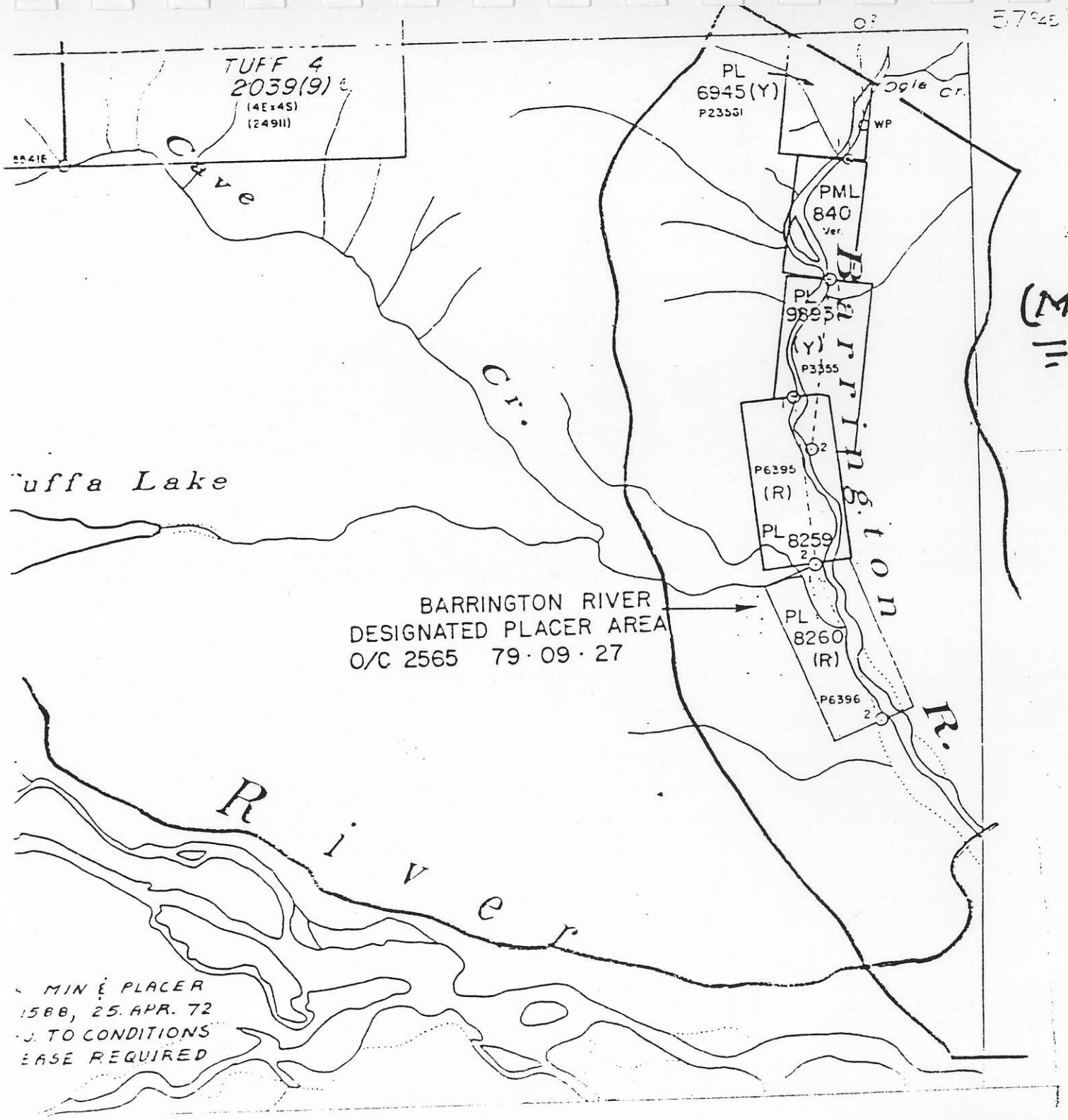

MAPSHEET
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